

ABSTRACT OF THE DISCLOSURE

A high voltage semiconductor device having a high current gain hFE is formed with a collector region (20) of a first conduction type, an emitter region (40) of the first conduction type, and a base region (30) of a second conduction type opposite to the first conduction type
5 located between the collector region and the emitter region. The free carrier density of the base region (30) where no depletion layer is formed is smaller than the space charge density of a depletion layer formed in the base region (30).